



SFUND RECORDS CTR
2156483


ICF International / Laboratory Data Consultants

Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Chris Lichens, Remedial Project Manager
Site Cleanup Section 4, SFD-7-4

THROUGH: Rose Fong, ESAT Task Order Manager (TOM) RF
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager 
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00105083 Amendment 1

DATE: October 3, 2007

SUBJECT: Tier 1A Data Evaluation Memo for the Omega Chem OU2 site, SDGs: IQG0607, IQG0879, IQG1031, and IQG1213

SUMMARY: 16 groundwater samples received by TestAmerica Analytical Testing Corp. were analyzed for Chemical Oxygen Demand (COD) by EPA Method 410.4.

A forms-only evaluation of the data packages was performed to identify any key analytical issues/deficiencies affecting data quality. This evaluation approach is employed when in-depth data review is not required as indicated by the data user. During this limited evaluation, areas of concern were noted (see Lettered and Additional Comments).

The evaluation included: a review of the data package for completeness, review of the chain of custody forms (against laboratory reported information, for signatures, for sample condition upon receipt by the laboratory and for sample preservation), review of holding times, review of QC summaries, review of blanks for contamination, random check of reported results against raw data, and a random check of raw data for interference problems or system control problems.

The following data quality issues should be noted:

- A. The COD results for all samples in SDG IQG1031 should be estimated and flagged "J" due to inadequate sample preservation. These samples did not meet Method 410.4 sample preservation criterion of 4°C. The samples were not adequately preserved in the field and arrived at the laboratory at a temperature of 13°C. The COD results for all samples in SDG IQG1031 may be biased low and false negatives may exist.

Additional Comments:

1. The Chain of Custody (COC) record form did not specify a sample to be used for laboratory quality control (QC). As a result, the laboratory selected the QC samples. The effect on data quality is not known.
2. The exact type of sample preservation was not provided on the COC record forms. However, the laboratory Case Narrative indicates no problems were encountered. No adverse effect on data quality is expected.

A Table 1A was not requested.

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

- U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The result is an estimated quantity, but the result may be biased high.
- J- The result is an estimated quantity, but the result may be biased low.
- R The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
- UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.